

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

THE NIELSEN COMPANY (US), LLC,

Plaintiff,

v.

HYPHAMETRICS, INC.,

Defendant.

Civil Action No. 23-136-GBW

THE NIELSEN COMPANY (US), LLC,

Plaintiff,

v.

HYPHAMETRICS, INC.,

Defendant.

Civil Action No. 23-532-GBW

David E. Moore, Bindu A. Palapura, POTTER ANDERSON & CORROON LLP, Wilmington, DE; Paul H. Berghoff, James L. Lovsin, Mateusz J. Kulesza, Alexandra E. Criner, Christopher M. Scurry, Jerry Lu, Christian Karpinski, MCDONNELL BOEHNEN HULBERT & BERGHOFF LLP, Chicago, IL; Steven Yovits, Constantine Koutsoubas, Douglas Lewis, Jason P. Greenhut, KELLY DRYE & WRREN LLP, Chicago, IL.

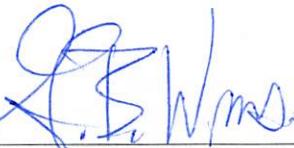
Counsel for Plaintiff

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Counsel for Defendant

MEMORANDUM OPINION

July 22, 2025
Wilmington, Delaware



GREGORY B. WILLIAMS
UNITED STATES DISTRICT JUDGE

Pending before the Court is Defendant's¹ Motion for Summary Judgment (D.I. 157), which has been fully briefed (D.I. 158; D.I. 166; D.I. 185; D.I. 188²). At issue in this case are U.S. Patents Nos. 10,970,588 ("the '588 patent"), 11,893,782 ("the '782 patent"), and 11,652,901 ("the '901 patent") (together, the "Asserted Patents"). D.I. 158 at 1. Hyphametrics submitted two summary judgment motions and ranked them in the following order: 1) Invalidity of the Asserted Patent Claims and 2) No Infringement of the Asserted Patent Claims.³

For the following reasons, the Court 1) DENIES Motion No. 1 and 2) DENIES Motion No. 2.

I. BACKGROUND

On February 3, 2023, Nielsen filed the Complaint in the instant case, 1:23-cv-00136-GBW-CJB, asserting infringement of the '588 patent. D.I. 1.⁴ Nielsen filed another patent suit, 1:23-cv-00532-GBW-CJB ("the 532 case"), on May 17, 2023, asserting infringement of the '901 patent.

¹ The Plaintiff is Nielsen Company (US), LLC ("Nielsen" or "Plaintiff"). The Defendant is Hyphametrics, Inc. ("Hyphametrics" or "Defendant").

² Because Hyphametrics' Reply Brief cited *Receptive Analytics, Inc. v. Fox Corp.*, 134 F.4th 1205 (Fed. Cir. 2025), which was issued after Hyphametrics filed its Opening Brief and after Nielsen filed its Answering Brief, the parties stipulated to allow Nielsen to submit a Sur-Reply Brief. *See* D.I. 187.

³ It is unclear if the Defendant also asserts a motion for invalidity under § 112 with respect to the '588 and '782 patents. *See* D.I. 158 at 2. Nielsen contends that the Court should not address this § 112 argument because Hyphametrics did not properly include the argument in its motion. D.I. 166 at 25. Because the Court denies Hyphametrics' first summary judgment motion, in accordance with this Court's summary judgment ranking procedures, it need not address this § 112 argument.

⁴ Unless indicated otherwise, all docket indicators refer to case 1:23-cv-00136-GBW-CJB.

The 532 case, D.I. 1. Hyphametrics filed its answer in the 532 case on July 7, 2023. The 532 case, D.I. 16. The cases were consolidated on July 17, 2023. D.I. 22. In the instant case, Nielsen filed a supplemental complaint on April 1, 2024 asserting infringement of the '782 patent. D.I. 81. Hyphametrics filed its answer to the supplemental complaint on April 15, 2024. D.I. 89. Nielsen asserts that Hyphametrics infringes claims 1 and 10 of the '588 patent ("the '588 Patent Asserted Claims") and claims 10, 12-14, and 16 of the '782 patent ("the '782 Patent Asserted Claims"). *See* D.I. 81. Nielsen asserts that Hyphametrics infringes claims 1-6 and 8-21 of the '901 patent ("the '901 Patent Asserted Claims"). *See* the 532 case, D.I. 1. Hyphametrics filed its Motions for Summary Judgment on March 10, 2025. D.I. 157.

II. LEGAL STANDARDS

"The court shall grant summary judgment if the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(a). "A genuine issue of material fact is one that could lead a reasonable jury to find in favor of the nonmoving party." *Bletz v. Corrie*, 974 F.3d 306, 308 (3d Cir. 2020). "The court must review the record as a whole, draw all reasonable inferences in favor of the nonmoving party, and must not 'weigh the evidence or make credibility determinations.'" *Id.* at 308 (quoting *Parkell v. Danberg*, 833 F.3d 313, 323 (3d Cir. 2016)).

III. DISCUSSION

A. Summary Judgment Motion 1: Hyphametrics' Motion for Summary Judgment of Patent Invalidity of the Asserted Claims is Denied

Hyphametrics requests summary judgment of patent invalidity of all asserted claims of the '901 patent and the '588/'782 patents⁵ as patent ineligible under 35 U.S.C. § 101. D.I. 158 at 9-10. For the foregoing reasons, the Court DENIES Hyphametrics motion.

1. Patent Eligibility Legal Standard

35 U.S.C. “§ 101 is a threshold inquiry in obtaining patent protection.” *Astellas Pharma, Inc. v. Sandoz Inc.*, 117 F.4th 1371, 1378 n.2 (Fed. Cir. 2024). Patent claims that fail to comply with § 101 are invalid. *See Aatrix Software, Inc. v. Green Shades Software, Inc.*, 890 F.3d 1354, 1356 n.2 (Fed. Cir. 2018) (denying petition for rehearing en banc). “[A] challenge to patent eligibility on § 101 grounds is an affirmative defense to a claim of patent infringement.” *Mobile Acuity Ltd. v. Blippar Ltd.*, 110 F.4th 1280, 1289 (Fed. Cir. 2024). “The burden to prove the ineligibility of any patent claim stays with the patent challenger at all times.” *Id.* at 1291.

With respect to the judicial exceptions to patent eligibility, “[w]e evaluate claims challenged under Section 101 by applying the now-familiar two-step *Alice/Mayo* framework.” *Beteiro, LLC v. DraftKings Inc.*, 104 F.4th 1350, 1355 (Fed. Cir. 2024). “At step one, we consider ‘whether the claims at issue are directed to [a] patent-ineligible concept’ such as an abstract idea.” *Id.* (alteration in original) (quoting *Alice Corp. Pty. v. CLS Bank Int'l*, 573 U.S. 208, 217 (2014)). “If they are, then we proceed to step two, at which ‘we consider the elements of each claim both individually and as an ordered combination to determine whether the additional elements

⁵ The '588 patent and the '782 patent share a specification, and both parties analyze these patents together. *See* D.I. 158 at 1; D.I. 166 at 4 n.4.

transform the nature of the claim into a patent-eligible application.”” *Id.* (quoting *Alice*, 573 U.S. at 217).

2. Summary of Pertinent Facts

The ’901 patent is titled “Systems, Methods, and Apparatus To Identify Media Devices.” ’901 Patent. The patented method uses internet connectivity to facilitate collection of audience viewership data. ’901 Patent at 1:43-60. The ’901 patent describes a “network communications monitor [that] is installed at [a] media exposure measurement location and identifies network communications to and/or from media devices within the media exposure measurement location,” and thereby “monitors all network devices within the media exposure measurement location.” *Id.* at 5:23-31. For example, the network communications monitor can be part of a wireless router and use the router to record the information of devices that are part of the wireless router network. *Id.* at 8:43-67.

The network communications monitor detects the network communications passing through it and “identifies a device associated with the network communications (e.g., a device that originated and/or is to receive the network communication) . . . based on a MAC address of the device involved in the network communications.” *Id.* at 5:31-41. In this manner, each device’s traffic can be uniquely attributed to the corresponding device. *Id.* at 12:11-15. “The network communications monitor creates a log and/or a record of the network communications . . . and electronically transmits the log and/or the record to the network activity measurement system (e.g., to an audience measurement such as [Nielsen]).” *Id.* at 31-38. The media access control (“MAC”) address of each panelist device is associated with a corresponding panelist device and/or panelist. *Id.* at 5:12-13. Unlike an Internet Protocol (“IP”) address, a MAC address does not change over time. *Id.* at 3:66-67. Using a MAC address allows more accurate identification of media devices. *Id.* at 4:29-36.

Claim 1 of the '901 patent recites:

A network communications monitor to log network traffic within a household that is monitored by an audience measurement entity, the network communications monitor comprising:

a network interface;

a processor; and

a non-transitory computer-readable medium having stored therein instructions that are executable to cause the network communications monitor to perform operations comprising:

detecting, via the network interface, multiple network communications transmitted on a wireless network within the household via a network gateway of the wireless network, wherein the network gateway is configured to route the multiple network communications within the wireless network;

accessing panelist data that associates a panelist of the household with a panelist device of the panelist;

determining, based on the panelist data, that a network communication of the multiple network communications is associated with the panelist device by determining that a media access control (MAC) address associated with the network communication matches a MAC address of the panelist device, and

causing storage of data identifying the network communication in association with the panelist,

wherein:

the network communications monitor is located within the household; and

the network communications monitor is implemented by the network gateway.

'901 Patent cl. 1.

The '588/'782 patents are titled "Recurrent Deep Neural Network System For Detecting Overlays In Images." '588 patent; '782 patent. The '588/'782 patent method detects semitransparent or opaque overlays, such as logos and/or text, in images, such as stills captured

from TV shows or other media presentations. '588 Patent at 2:49-51. A typical overlay is a feature having one or more shapes, logos, and/or characters (e.g. letters and/or numbers) that are co-located within a portion of the image (generally not in the center of the image) and that may be, but need not be, of a single, homogeneous color, grayscale, and/or pattern, for example. *Id.* at 6:47-52.

Unlike conventional logo removal techniques, the patented method “utilize[s] machine learning principles to determine which areas are likely to contain an overlay.” *Id.* at 3:8-11. A processor uses a feature map network and a probability map network to detect an overlay in an image. Each of the feature map network and the probability map network includes a corresponding neural network. *See, e.g., id.* at 5:49-67. The processor applies the feature map network to the image to create a feature map, and the processor applies the probability map network to the feature map to create a probability map. *See, e.g., id.* at 5:54-64, Figure 5. The feature map provides a numerical representation of a visual feature detected in the image by the feature map network, while the probability map indicates a likelihood of the visual feature being part of an overlay. *See, e.g., id.* at 6:13-15, 9:27-31. “Upon determining that the feature is probably an overlay (i.e. the probability exceeds a threshold), a processing action can be performed on the feature, such as removing the feature (e.g. removing the overlay using an inpainting algorithm).” *Id.* at 6:19-23.

Claim 1 of the '588 patent recites:

A method comprising:

a processor applying a feature map network to an image to create a feature map, wherein the feature map comprises a grid of vectors characterizing at least one feature in the image;

the processor applying a probability map network to the feature map to create a probability map assigning a probability to the at least one feature in the image, wherein the assigned probability corresponds to a likelihood that the at least one feature is an overlay;

the processor determining that the assigned probability exceeds a threshold probability value; and

responsive to the processor determining that the assigned probability exceeds the threshold probability value, the processor (i) determining compliance with an advertising requirement, (ii) performing optical character recognition (OCR) on the at least one feature, (iii) determining a channel associated with the at least one feature, (iv) determining a show associated with the at least one feature, (v) determining a hyperlink associated with the at least one feature, or (vi) accessing a hyperlinked object associated with the at least one feature.

'588 Patent cl. 1.

3. Analysis

Hyphametrics claims that the Asserted Patents are invalid under § 101 because they fail both steps of the *Alice* inquiry, alleging that these patents are directed to “the abstract ideas of monitoring viewer habits using neural network software to identify images and electronically created look-up tables to associate users with devices and devices with content” and lack any inventive concepts. D.I. 158 at 2. With respect to both patents, Hyphametrics is incorrect because the Asserted Patents are not directed to abstract ideas.

a. **The '901 Patent Asserted Claims Are Not Directed to an Abstract Idea Because They Overcome Technical Challenges**

Hyphametrics claims that the '901 Patent Asserted Claims fail *Alice* step one because they are directed to the abstract idea of collecting “information, comprehending the meaning of that collected information, and indication of the results, all on a generic computer network operating in its normal, expected manner.” *In re Killian*, 45 F.4th 1373, 1380 (Fed. Cir. 2022). Specifically, Hyphametrics contends that the '901 Patent Asserted Claims are directed to “the abstract idea of generating and collecting data representing audience viewing habits.” D.I. 158 at 13. Because, as Hyphametrics puts it, these claims are merely automating what had previously been done with pencil and paper, these claims fail at step one.

However, Hyphametrics’ contention is incorrect because the patents are not directed to an abstract idea. Rather, the ’901 Patent Asserted Claims overcome technical challenges to solve several problems in the prior art. In other words, the ’901 Patent Asserted Claims do not merely generate and collect data but, instead, develop technical solutions in order to generate and collect data.

As Nielsen explains, automating the collection of audience viewership data had two problems: 1) device-level monitoring and 2) network-level monitoring. D.I. 168 at ¶ 2 (undisputed). At the device-level, monitors had to install and maintain unique monitoring software for each kind of measured device, and some of the devices didn’t allow installation of software, making monitoring impossible. ’901 Patent at 4:65-5:6. Instead, the ’901 patent inventors developed a system of monitoring data at the network gateway, where all the data to and from the devices travels through. D.I. 168 at ¶ 2 (undisputed). As to network-level monitoring problems, the way to identify a network is typically with the IP address, but IP addresses can change over time. As a solution, the ’901 patent uses the IP address to determine the MAC address of the network gateway, which generally does not change. ’901 Patent at 4:29-36.

The Asserted Claims of the ’901 patent resemble the claims at issue in *SRI Intl., Inc. v. Cisco Sys., Inc.*, 930 F.3d 1295, 1299 (Fed. Cir. 2019). In that case, the Federal Circuit held that the claims at issue were “not directed to just analyzing data from multiple sources” but instead were directed “to an improvement in computer network technology.” *Id.* at 1303. The Federal Circuit contrasted the *SRI* claims with claims from other cases that were “directed to using a computer as a tool—that is, automating a conventional idea with a computer. Rather, the representative claim improves the technical functioning of the computer and computer networks by reciting a specific technique for improving computer network security.” *Id.* at 1304.

Similarly, the '901 Patent Asserted Claims are directed to the improvement in the functioning of a computer and, thus, do not fall into the abstract idea category. Although the process of determining the MAC address of a network gateway could be determined by a human, it does not fall into the abstract idea category because that step is about directing the computer to overcome a technological problem. The '901 Patent Asserted Claims are about solving an issue in collecting data, not about data collection itself. *See California Inst. of Tech. v. Broadcom Ltd.*, 25 F.4th 976, 988 (Fed. Cir. 2022) (holding that, since the patent at issue claimed “more than a mathematical formula [] directed to an efficient, improved method of encoding data,” the patent claim was not patent ineligible simply because it employed a mathematical formula).

In its brief, Hyphametrics misreads the holding of *In re Killian*. In *In re Killian*, the Federal Circuit stated that it was between distinguishing between claims “directed to an improvement in the functioning of a computer,” versus those that simply recite “generalized steps to be performed on a computer using conventional computer activity.” *In re Killian*, 45 F.4th at 1380 (quoting *In re TLI Commc 'ns LLC Pat. Litig.*, 823 F.3d 607, 612 (Fed. Cir. 2016)). It is the latter category of claims that the Federal Circuit held were directed to an abstract idea because they are directed to “analyzing information by steps people go through in their minds, or by mathematical algorithms.” *Id.* at 1379 (quoting *Elec. Power Grp., LLC v. Alstom, S.A.*, 830 F.3d 1350, 1354 (Fed. Cir. 2016)).

In the instant action, Hyphametrics’ contention that the claims are abstract because they “do nothing more than either automate existing processes or provide same solutions at a faster pace” is flawed because the claims are directed to improving computer functionality. D.I. 158 at 14; *cf. Angel Techs. Group, LLC v. Meta Platforms, Inc.*, No. 2022-2100, 2024 WL 4212196, at *4 (Fed. Cir. Sept. 17, 2024) (holding that the claim at issue was directed to, *inter alia*, the “the abstract idea of identifying users in photos” and not an improvement in computer capabilities).

Also, Hyphametrics claims that the '901 patent solution is just to “assign a number to a person through their media device” and, therefore, is directed to an abstract idea because that idea has already been done. D.I. 185 at 6. However, Hyphametrics’ claim is incorrect because that is not what the '901 patent claims are directed to. Although the solution involves using an assigned number, that assignment is just a step in the directed idea of improving computer functionality. Therefore, the '901 Patent Asserted Claims are not directed to abstract ideas.

b. The '588/'782 Patent Asserted Claims Are Not Directed to an Abstract Idea Because The Claimed Method is an Improvement in the Technical Field of Image Processing

Hyphametrics asserts that the asserted claims of the '588/'782 patents fail *Alice* step one because they “automate the process of identifying images by replacing the human editor with neural network software, thereby eliminating the need to manually view and mark unwanted regions (e.g., an overlay) in each image.” D.I. 158 at 10 (internal quotation marks and citation omitted). Hyphametrics cites *Electric Power Group* for the proposition that “[m]erely requiring the selection and manipulation of information—to provide a ‘humanly comprehensible’ amount of information useful for users . . . —by itself does not transform the otherwise-abstract processes of information collection and analysis.” 830 F.3d at 1355 (citation omitted).

Hyphametrics’ assertion is incorrect because not all claims that automate processes are directed to abstract ideas. The '588/'782 Patent Asserted Claims are analogous to the claims upheld as patent eligible in *McRO, Inc. v. Bandai Namco Games Am. Inc.*, which also employed a computer to “perform a distinct process to automate a task previously performed by humans.” 837 F.3d 1299, 1314 (Fed. Cir. 2016). In *McRO*, the Federal Circuit distinguished the claims from patent ineligible automation claims because there was “no evidence that the process previously used by [humans] is the same as the process required by the claims.” *Id.* In other words, while the claims provided the same output as humans provided, the claimed process was held as not

directed to patent ineligible subject matter because it was “the incorporation of the claimed rules, not the use of the computer, that ‘improved [the] existing technological process’ by allowing the automation of further tasks.” *Id.* (quoting *Alice*, 573 U.S. at 223).

Likewise, for the ’588/’782 Patent Asserted Claims, there is “no evidence that the process previously used by [humans] is the same as the process required by the claims.” *Id.* Previously, humans had to recognize and write down what was on the screen in a paper diary. D.I. 158 at 2; D.I. 166 at 20. Now, the ’588/’782 Patent Asserted Claims take a different approach by applying a feature map network and a probability map network to perform a distinct process. *See, e.g.*, ’588 Patent at 5:49-67. As a result, the claimed method provides “an improvement to the technical field of image processing, and, in particular, to improving speed and reliability of detecting overlays in images, with reduced or eliminated human oversight.” *Id.* at 3:18-22. Thus, the claimed method does not merely automate a process done by humans because “the claimed rules, not the use of the computer, [] improve[s] [the] existing technological process.” *McRO*, 837 F.3d at 1314.

Moreover, Hyphametrics asserts that these patent claims are directed to an abstract idea because they merely state “functional language with no apparent structure” and use generic terms like “applying” and “determining.” D.I. 158 at 12. Hyphametrics asserts that these generic terms “are abstract because they ‘involve making determinations and identifications, which are mental tasks humans routinely do.’” *Id.* (quoting *In re Killian*, 45 F.4th at 1379). Hyphametrics is incorrect. These claims contain structure because they, *inter alia*, recite the specific networks used to perform the detection (i.e., the “feature map network” and the “probability map network.”), the inputs of these networks (i.e., “an image” and “the feature map,” respectively), the outputs of these

networks (i.e., “the feature map” and “the probability map,” respectively), and how these outputs are used to make the determination that an overlay is present in the image.

Hyphametrics also claims that the ’588/’782 Patent Asserted Claims are more akin to the claims at issue in *Recentive Analytics, Inc. v. Fox Corp.*, 134 F.4th 1205 (Fed. Cir. 2025). In *Recentive Analytics*, the patents relied “on the use of generic machine learning technology in carrying out the claimed methods for generating event schedules and network maps.” *Id.* at 1212. The Federal Circuit held that the patents were directed to ineligible, abstract subject matter because “[a]llowing a claim that functionally describes a mere concept without disclosing how to implement that concept risks defeating the very purpose of the patent system.” *Id.* at 1213.

Hyphametrics’ contention is incorrect. The ’588/’782 Patent Asserted Claims provide “an improvement to the technical field of image processing, and, in particular, to improving speed and reliability of detecting overlays.” ’588 Patent at 3:18-22. After examining the patent claims themselves, this case is not one where the patents merely “apply machine learning to this new field of use.” *Recentive Analytics*, 134 F.4th at 1213. Instead, the patent claims list specific steps for improving computer functionality. *See* ’588 Patent cl. 1 (listing the steps the method goes through to create a probability map).

Lastly, Hyphametrics’ attempts to create a comparison between the overlay detection in the ’588/’782 Patent Claims to the conventional machine learning patent claims found patent ineligible in *Recentive Analytics* are misguided. D.I. 185 at 4. According to Hyphametrics, both overlay detection and machine learning are simply using “something that already exists” to “provide[] a solution that is simply faster (using a standard computer) and requires less human labor. *Id.* Hyphametrics stretches this analogy too far. The ineligible patent claims in *Recentive Analytics* were conventional—and thus patent ineligible—because they simply required “any

suitable machine learning technology". *Recentive Analytics*, 134 F.4th at 1212 (citation omitted). On the other hand, the '588/'782 patent claims do not claim conventional use of overlay detection because they specify the use of probability maps to implement the overlay detection. *See, e.g.*, '588 Patent cl. 1.

Given all of the foregoing, the '588/782 Patent Asserted Claims are not directed to an abstract idea. Therefore, Hyphametrics' Motion for Summary Judgement of Patent Invalidity of the Asserted Claims is denied.

B. Hyphametrics' Remaining Summary Judgment Motion Is Denied

Given the Court's denial of Hyphametrics' first ranked summary judgment motion, the Court denies Hyphametrics' summary judgment motion No. 2 (non-infringement of the '588/'782 Asserted Claims and '901 Asserted Claims) in accordance with its ranking procedures.

IV. CONCLUSION

For the foregoing reasons, the Court **DENIES** Defendant Hyphametrics' Summary Judgment Motions Nos. 1 and 2. An Order consistent with this Memorandum Opinion will be entered.